Alternative Energy Sources

*33. SHRIMATI SUKHBUNS KAUR: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) whether in view of the fast depleting and drying oil reserves, not only in India but all over the world, India and China have begun considering practical long term proposals to diversify supply of energy resources and to loosen the grip of oil exporting nations on their growing economics;

(b) whether Government have taken stock of India's abundant alternative sources of energy, in the form of hydroelectric power potential, wind and water energy, natural gas, N-energy;

(c) if so, the outcome thereof; and

(d) the new long term power policy, if any, evolved?

THE MINISTER OF PETROLEUM AND NATURAL GAS (SHRI MANI SHANKAR AIYAR): (a) Given the increasing gap between demand and domestic availability of crude oil, besides taking measures to accelerate exploratory activities for enhancing domestic oil and gas production, it has become essential for our energy security to step up efforts overseas in search of equity oil and gas. Towards this end, and in keeping with the objecives of the National common Minimum Programme, ONGC, videsh Ltd. (OVL) as well as other National Oil Companies (NOCs) such as Indian Oil Corporation Ltd. (IOC), Oil India Ltd. (OIL) and Gail (India) Ltd. (GAIL) have been pursuing the acquisition of equity oil as well as oil and gas exploration acreages and producing properties abroad.

Looking into the vast possibilities of forging alliances with Chinese oil companies, the NOCs of India and China keep in touch with each other on a case-to-case basis. A joint Task Force of the Ministries of External Affairs and Petroleum and Natural Gas has been established to examine the prospects for Sino-lndian cooperation in the hydrocarbon sector.

(b) to (d) With regard to the development of hydro-electric projects in the country, out of the total capacity addition of 14,393 MW targeted for the 10th Five Year Plan (2002—07), the hydro capacity so far added/ commissioned is 4,495 MW as on 15.7.2005. The total hydro capacity likely to be added in the 10th Plan is about 10,044 MW, including 4,495 MW already achieved.

In adition to the possibilities of generating nuclear energy from natural and enriched uranium, much of which is and will continue to be imported, India has vast reserves of thorium. With a view to harnessing the huge potential of thorium for electricity generation, Department of Atomic Energy is pursuing a three-stage nuclear power programme. The three stages of the programme have to be gone through sequentially. The first stage has reached a status of commercial maturity. There are 15 nuclear power reactors totaling a capacity of 3,310 MW in the country. Construction is also going on in full sowing for seting up 7 nuclear power reactors totaling 3,420 MW which will be completed in the next three years. We have entered the second sage with the commencement of a 500 MW Prototype Fast Breeder Reactor in the year 2003. The third stage of the programme will be launched once we have reached a sizeable capacity in the second stage.

The estimated potential of renewable energy such as wind, small hydro and bio-mass is about 80,000 MW in the country. The aim is to deploy around 3,000 MW capacity from renewables durign the 10th Plan period, comprising around 5% from wind (1,500 MW), 2% from small hydro-power (600 MW) and 3% from bio-energy (900 MW). During the first 3 years of the 10th Plan (2002-05), 2,643 MW of additional installed power capacity has been commissioned.

The Ministry of Non-Conventional Energy Sources have prepared on Outline Plan for providng energy security to villages through the deployment of bio-energy and small hydro technologies. These includ bio-gas plants, bio-mass gasifiers and bio-fuels supported by fast-growing energy plantations for woood, oilseeds, etc. with the aim of providing to total energy requirments of cooking, lighting and motive power, with the full participation of the village community, including women, 24 Test Projects on rural energy security have been taken up in remote unelectrified villages in 3 States, with a view to demonstrating their technical feasibility, providing operational experience, mobilizing local communities and firming up institutional arrangements. One such project in madhya Pradesh has ben commissioned. The projects are being implemented by Gram Panchayats with facilitation by the Zila Parishads, the Forest Departments and NGOs. Based on the outcome of the Test Projects, a larger operational programme might be formulated.